AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for the protection of an electric power transmission network, where local protection functions are implemented by a plurality of local protection devices located at a first plurality of locations throughout the network, wherein the method comprises the steps of

- measuring phasor data for voltages and currents at a second plurality of locations of the network,
- transmitting said phasor data to a central processing device,
- emulating, in the central processing device, local protection functions that are implemented in the local protection devices, and
- executing, in accordance with a given redundancy strategy, control commands that are issued redundantly by the local protection devices and by the central processing device.

2. (Previously Presented) Method according to claim 1, wherein a protection function emulated in the central processing device is one of a differential protection function, a phase comparison function, an overcurrent detection function, or a thermal overload detection function.

3. (Previously Presented) Method according to claim 1, wherein a protection function emulated in the central processing device is a distance protection function.

4. (Previously Presented) Method according to claim 1, comprising the step of

- adapting values of predetermined parameters that are used in the protection function in accordance with measured phasor values.

5. (Original) Method according to claim 4, wherein the predetermined parameters are impedances of lines or equivalent circuits.

6. (Original) Method according to claim 4, wherein the predetermined parameters are limit values that, when exceeded, cause protective action to be taken.

7. (Original) Method according to claim 6, comprising the steps of

- computing, from measured phasor values, a stability measure of the network, and
- adapting limit values in accordance with said stability measure.

8. (Previously Presented) Method according to claim 4, wherein the distance protection function for a power line linking a first bus of the network to a second bus of the network comprises at least one of the steps of

- determining, an equivalent representation of the network as observed at the first bus, and
- determining an equivalent representation of the network as observed at the second bus,

and the step of

- computing a distance protection algorithm that incorporates at least one of the equivalent representations of the network as observed at the first or second bus, respectively.

9. (Currently Amended) ~~Computer~~A computer-readable medium having a computer program stored thereon for execution on a data processing unit to perform the protection of an electric power transmission network ~~which is loadable and executable on a data processing unit and~~, which computer program, when being executed, performs the steps according to claim 1.

10. (Previously Presented) Data processing system for the protection of an electric power transmission network comprising means for carrying out the steps of the method according to claim 1.

11. (New) A central processing device for the protection of an electric power transmission network comprising a plurality of local protection devices, the latter being located at a first plurality of locations throughout the network and implementing local protection functions, where the central processing device comprises means for

- emulating, based on phasor data for voltages and currents measured at a second plurality of locations of the network and transmitted to the central processing device, local protection functions that are implemented in the local protection devices, and
- issuing control commands that are redundant with control commands issued by the local protection devices.